DETERMINATION OF SCAVENGE ACTIVITY AND PHENOLIC CONTENTS IN AQUEOUS AND ETHANOLIC EXTRACT OF DRAGON FRUIT

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ABSTRACT

This study was carried out to determine the total phenolic content and scavenge activity as well as to determine which solvent extraction will producing high content of total phenolic content in Dragon Fruit. Two solvent extractions were used in these studies which are water and ethanol. In total phenolic method, Gallic acid was used as the standards thus the total phenolic content was expressed as mg GAE / g fresh sample. The higher total phenolic content is shown by red-ethanolic extract (1.395±0.022) mg/g followed by red-aqueous extract (1.130±0.029) mg/g, white-aqueous extract (0.733±0.022) mg/g and the lowest is shown by white-ethanolic extract (0.569±0.017) mg/g. The percentage of scavenge activity of red-aqueous extract shows the highest with 95.51%, followed by red-ethanolic extract (93.02%),white-ethanolic extract (81.38%) and the lowest is white-aqueous extract (75.81%). The overall results indicated that the red dragon fruit contain high total phenolic content and higher percentage of scavenge activity compare to white one. So, the red one is concluded to contain more antioxidant properties compare to the white one.